

# DOCUMENT RESUME

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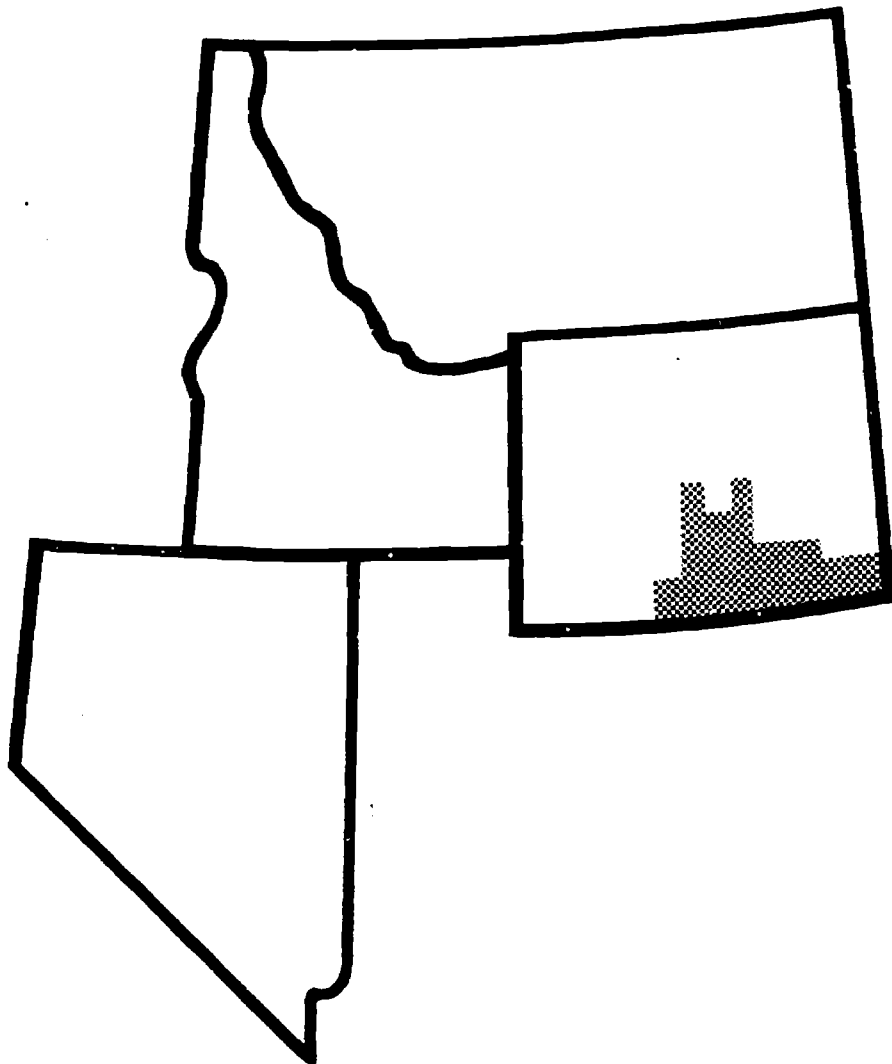
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## ABSTRACT

The profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for the Albany-Laramie Counties area of Wyoming, one of seven surveyed in the Mountain States region (Idaho, Montana, Wyoming, and Nevada). The first section of the profile provides general population information, income distributions, and occupational groups of employed persons in the area surveyed. The second section lists the number of people employed in 103 categories of health occupations. The third section lists health education institutions which offer degree or certificate programs in the health field. It includes information about libraries in health related fields and the availability of video-tape equipment. The fourth section is an enumeration of health facilities in the area surveyed. Comparisons are made within the four States and to the United States in toto. Other regions covered are Carson-Washoe County (CE 000 658), Treasure Valley (CE 000 659), Yellowstone County (CE 000 661), Missoula County (CE 000 662), Clark County (CE 000 663), and Sheridan County (CE 000 664). (AG)

**ALBANY-LARAMIE COUNTIES  
HEALTH MANPOWER AND EDUCATION  
PROFILE**

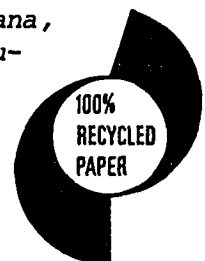
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A Publication of the  
**MOUNTAIN STATES REGIONAL MEDICAL PROGRAM**

1972 EDITION

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A PUBLICATION OF THE MOUNTAIN STATES REGIONAL MEDICAL PROGRAM

ALBANY-LARAMIE  
HEALTH MANPOWER AND EDUCATION PROFILE

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## PREFACE

The sparse population and the scattered population centers of the western states provide a unique set of problems in meeting the health needs of the people within this area. Further, three of the four states served by the Mountain States Regional Medical Program, Idaho, Montana, and Wyoming, do not have medical schools. The fourth state, Nevada, served by the Region has a two-year medical school.

During the summer of 1972, Mountain States RMP directed a concentrated effort toward describing in detail the numbers of health workers in seven community areas in the Region. Additionally, the numbers and kinds of health education occurring in the community were described, and a summary of economic and demographic characteristics of the areas was compiled. This firsthand, current assessment is necessary to plan effectively for programs which aim to increase needed health manpower supply and skill relevance at the community level. Numerous organizations, including the Mountain States Regional Medical Program in its "Health Training Network" activities, are currently approaching this complex problem. Essentially then, the profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for each of the seven community areas surveyed in the Mountain States region.

However, the information contained in this profile provides only the "what is" with regard to health manpower and education in the community area. To be used as an effective planning tool, the profile should be accompanied with statements of what "ought to be" with regard to the

distribution, supply, and skill relevance of the health manpower pool necessary to best serve the community area. Comparisons of the "real" and the "desirable" can provide a basis for planning increasingly relevant health education programs. This profile is intended, therefore, to be used by local groups concerned with health planning, by the Mountain States RMP, by educational institutions and state boards of education, by consumers, by health professionals and by other health organizations.

The compilation of the data presented has depended upon the assistance and energies of many persons too numerous to list; however, special acknowledgement is due to Larry Bertilson, Wyoming Comprehensive Health Planning Services, and Alice Lane, Wyoming State Library; and to Mrs. June Geiger, Mrs. Martha Nichols and Mrs. Myrna Ferguson for their assistance in the preparation of this profile. Additional acknowledgement is due to the many persons who provided basic information for the profile; they are listed in Appendix 2.

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August 1972

## INTRODUCTION

The data contained here are divided into four basic parts. First is the demographic data for the area with general population information, income distributions, and occupational groups of employed persons in the area surveyed. This information was obtained from the U.S. Bureau of the Census publications for the 1960 and the 1970 census.

In the second part, the number of persons working in health professions was tallied by the setting in which they are employed. Insomuch as there are some 103 categories of occupations of health workers listed, a set of brief occupational descriptions is given in the appendices to indicate what kinds of employment were included in a given category. Further, a listing of the specific institutions in which health personnel were surveyed is included; in this way, any discrepancies may be readily detected. The exception is private offices, the list of which is too lengthy to include. Importantly, only those health personnel who were employed were enumerated; thus, if a person is a medical technologist, for example, that person was counted only if he or she was currently practicing in the area. In this way a clear picture of the health manpower actually serving the area may be realized. In all cases, part-time employees counted as one-half; therefore, some numbers may have a "0.5" attached which accounts for part-time employees.



## INTRODUCTION (Contd.)

Every attempt has been made to insure the accuracy of the data presented; it is conceivable, however, that some persons may not have been counted or that the information that we obtained was in error by passage of time or inaccurate records. Further, we attempted to gather as much information as possible by direct contact with the various work settings rather than through secondary sources. Thus, all data not directly annotated may be assumed to be primary data obtained by interview, telephone contact, questionnaire, etc. In a very few cases, an accurate count simply was not available within budget and time constraints. In these cases the quantity is clearly marked by an asterisk and noted to be an estimate, or was omitted.

The third section is a quantification and listing of the various health education resources and institutions within the area. This section lists the institutions which offer course work leading to a certificate or degree preparing graduates to practice in the health field. This section also contains information about libraries in health related fields and video-tape equipment available to health education and practicing personnel.

The fourth and final section is an enumeration of health facilities such as a number of hospitals, ambulances, pharmacies, and other facilities in the area surveyed.

The general order of presentation of any given set of data is one in which a brief introduction to the section is given describing the specific limitations and features of the data in that section; and a

## INTRODUCTION (Contd.)

Brief narrative description of the data is given in order to highlight the unusual quantities obtained in the survey. Secondly, a graphic comparison is made with the local quantities of the four state area of Idaho, Montana, Nevada, and Wyoming (Mountain States region) and to the United States in toto, where such a visual demonstration of the information is deemed useful. Finally, the raw data for the given category is provided for those readers who wish a more detailed description.

Detailed information about procedures and raw data are available upon item-specific request made to:

Mountain States Regional Medical Program  
Wyoming Division  
3100 Henderson Drive  
Cheyenne, Wyoming 82001

## SECTION I: POPULATION CHARACTERISTICS

### A. INTRODUCTION

This section provides a statistical description of the general demographic characteristics including total densities, rural-urban distributions, and age distributions, the economic characteristics of the area in terms of the per capita and family median incomes; and the occupational characteristics of the area in terms of the numbers of persons employed in various selected occupational groups.

Included here are comparison graphs indicating how the Albany-Laramie area compares with the Mountain States Region and the United States for given selected statistics from this section.

### B. NARRATIVE SUMMARY

#### 1. POPULATION DENSITY:

The population density of Albany-Laramie Counties reflects the generally low density of the Mountain States Region. In studying of the graphic display the reader need keep in mind that Albany County and Laramie County contain two of the larger cities in Wyoming: Laramie and Cheyenne, respectively. Further, the graph area between "10" and "50" reflects a change in scale in order to include the National figure of some 57 persons per square mile. (see Figure 1)

#### 2. GROWTH RATE:

Perhaps a more crucial observation from the demographic data is the fact that the growth rate of the Albany-Laramie

County Area is substantially lower than either: the Mountain States Region or the United States in toto. This indication is primarily accounted for by the loss in population of Laramie County of some three thousand persons between 1960 and 1970. (see Figure 2)

#### 3. AGE DISTRIBUTION:

The deviation in age distribution for the 18 to 22 years segment may be explained by the location of the University in Albany County. Otherwise the distribution is not dissimilar from the Nation in general.

#### 4. FAMILY MEDIAN INCOME:

The income levels for both per capita and family median income is substantially lower than the National averages. The graph reflects only a marginal difference; however, the difference represents approximately a one-third separation between the Albany-Laramie County area and the National figures. (see Figure 3)

#### 5. OCCUPATIONAL CHARACTERISTICS:

In terms of health workers, the Albany-Laramie area graph indicates that we have a somewhat lower ratio of health workers than does the United States generally; and further that our rate of increase for health workers to population is lower than that of the Nation. (see Figure 4)

### C. DEMOGRAPHIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Albany-Laramie Counties

Population: 1960 81,439<sup>1</sup> 1970 82,791<sup>2</sup> Per Cent Change 1.7%+

Geographic Area: 6,951 Square Miles <sup>2</sup>

Population Density: 11.9 Pers./Sq. Mi. <sup>2</sup>

\*Rural Population: 1960 20,414<sup>1</sup> 1970 14,277<sup>2</sup>

Urban Population: 1960 61,025<sup>1</sup> 1970 68,584<sup>2</sup>

Age Distribution (1970): <sup>3</sup>

0-4	<u>7,428</u>	45-49	<u>4,233</u>
5-9	<u>8,121</u>	50-54	<u>4,060</u>
10-14	<u>8,169</u>	55-59	<u>3,456</u>
15-19	<u>8,580</u>	60-64	<u>3,003</u>
20-24	<u>9,726</u>	65-69	<u>2,225</u>
25-29	<u>6,233</u>	70-74	<u>1,754</u>
30-34	<u>4,765</u>	75-79	<u>1,205</u>
35-39	<u>4,580</u>	80-84	<u>715</u>
40-44	<u>4,339</u>	85+	<u>438</u>

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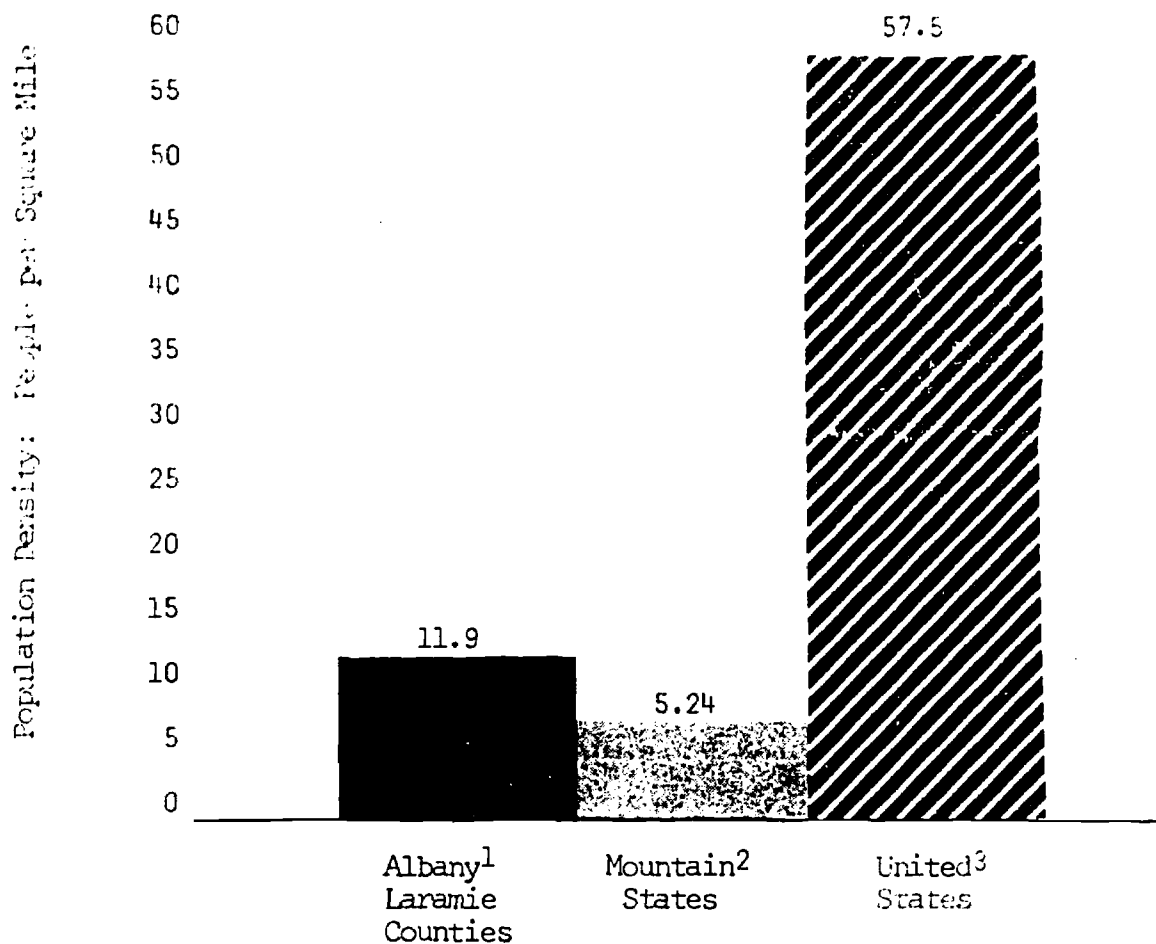
\* Rural Population: 2500 or Less  
Urban Population: 2501 and Over

<sup>1</sup> U.S. Bureau of Census. U.S. Census of Population: 1960. Number of Inhabitants. Final Report PC (1)-52A Wyoming. U.S. Government Printing Office, Washington, D.C., 1961. p. 10.

<sup>2</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC (1)-52A Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

<sup>3</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Population Characteristics. Final Report PC (1)-52B Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 52.

FIGURE 1: Population Density

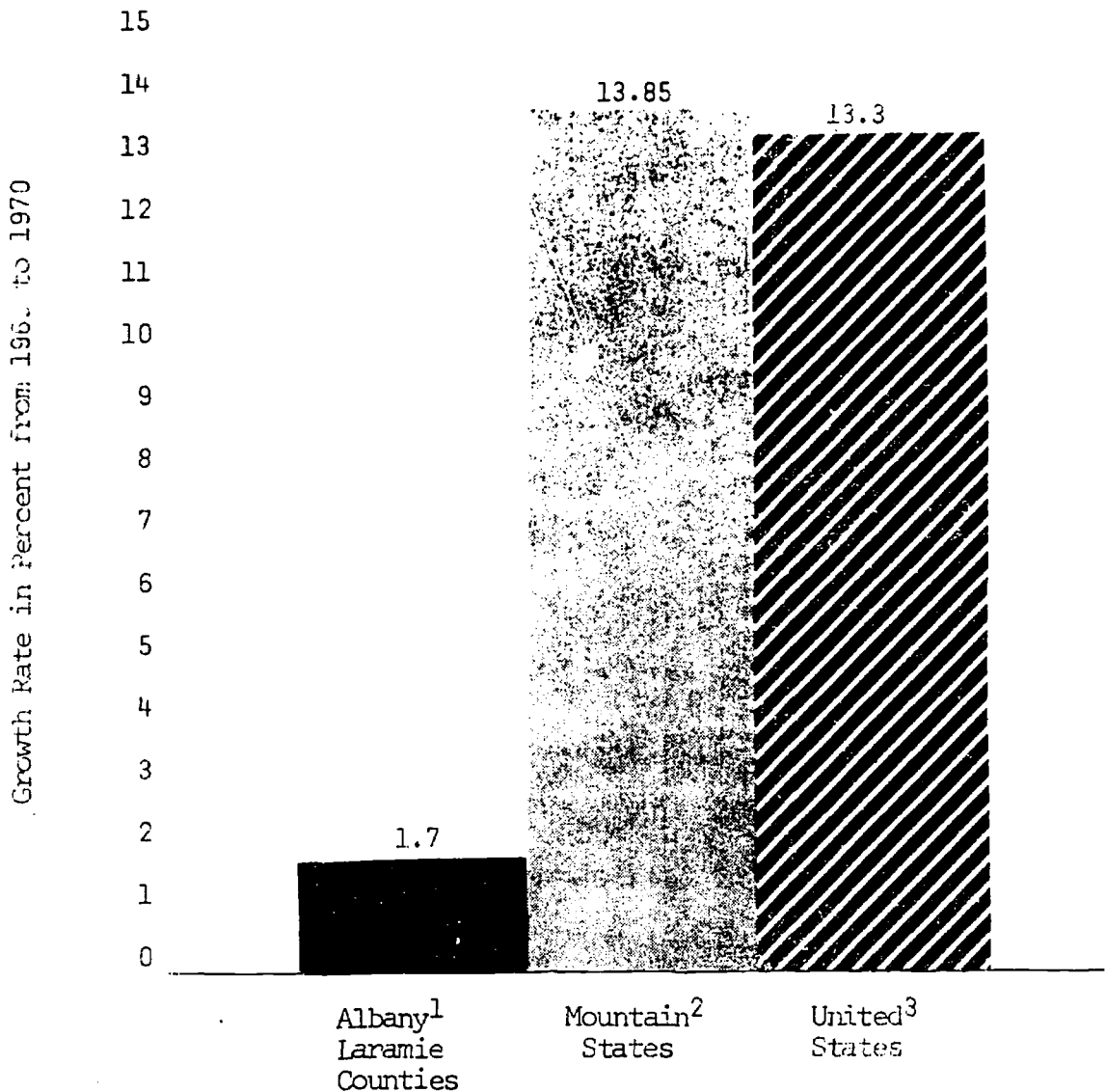


<sup>1</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC (1)-52A Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

<sup>2</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants, (Combined Data from Idaho, Montana, Nevada and Wyoming) U.S. Government Printing Office, Washington, D.C., 1971.

<sup>3</sup> U.S. Bureau of Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

FIGURE 2: Growth Rate



<sup>1</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC (1)-52A Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

<sup>2</sup> U.S. Bureau of Census, U.S. Census of Population: 1970. Number of Inhabitants, (Combined data from Idaho, Montana, Nevada and Wyoming).

<sup>3</sup> U.S. Bureau of Census, Statistical Abstract of the United States: 1960 and 1971 (Combined Data) U.S. Government Printing Office, Washington, D.C.

# D. ECONOMIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Albany-Laramie Counties

County	Per Capita Income		Family Median Income	
	1960 <sup>1</sup>	1970 <sup>2</sup>	1960 <sup>1</sup>	1970 <sup>2</sup>
Albany County	\$1,782	\$2,738	\$5,816	\$8,535
Laramie County	2,152	2,993	6,386	9,162
Sheridan County	1,792	2,896	5,306	8,096
.....				
				3
Wyoming		2,143		8,943
Mountain States		3,395		8,995
United States		3,910		9,867

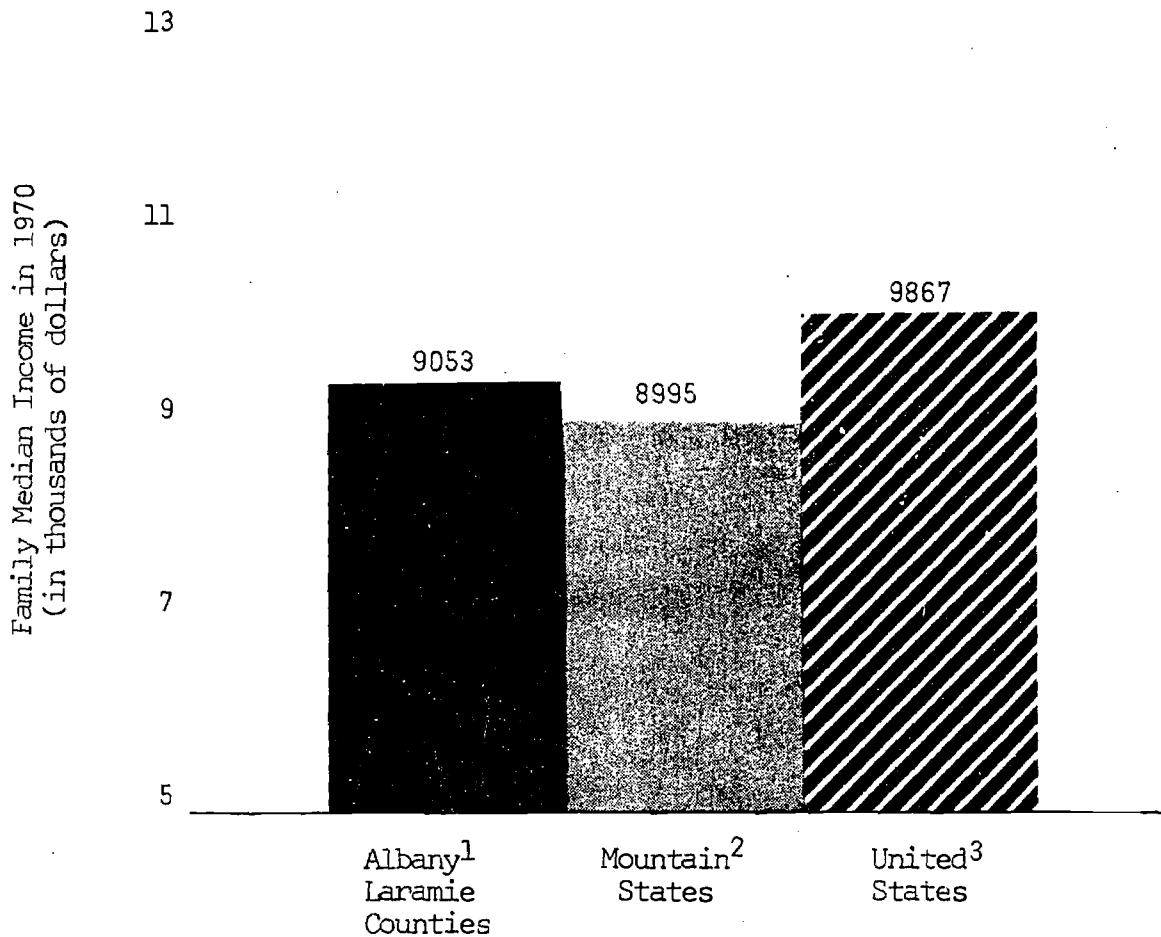
<sup>1</sup> U.S. Bureau of Census. Per Capita and Median Family Money Income in 1959 for States, SMA's and Counties. PC (S1)-48. U.S. Government Printing Office, Washington, D.C., 1960. p. 40.

<sup>2</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. pp. 156-157.

<sup>3</sup> All United States and Mountain States data were obtained from the 1966 and 1971 Statistical Abstracts for the U.S. U.S. Government Printing Office, Washington, D.C.



FIGURE 3: Family Median Income



<sup>1</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report. PC (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. pp. 156-157.

<sup>2</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, (Combined data from Idaho, Montana, Nevada, and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

<sup>3</sup> U.S. Bureau of Census. Current Population Reports, Consumer Income. Series P-60, No. 78. U.S. Government Printing Office, Washington, D.C. 1971. p. 4.

## E. OCCUPATIONAL CHARACTERISTICS: STATISTICAL SUMMARY

Selected Occupational Group of Employed Persons

Area Surveyed Albany-Laramie Counties

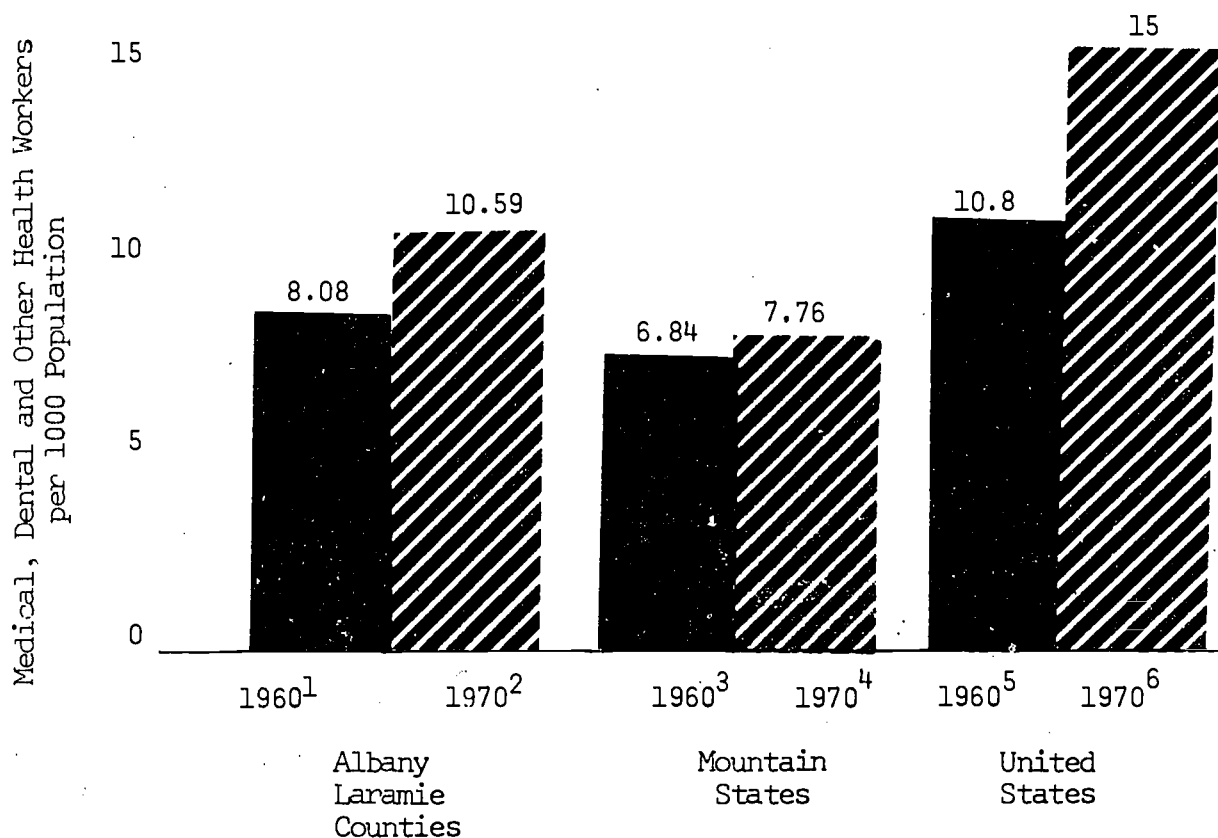
	1960 <sup>2</sup>	1970 <sup>3</sup>
1. TOTAL Professional, Technical and Kindred Workers	<u>4,626</u>	<u>5,964</u>
a. Medical, Dental and Other Health Workers	<u>658</u>	<u>877</u>
b. Salaried Medical and Health Workers (1960 only)	<u>505</u>	
c. Self-employed Medical and Health Workers (1960 only)	<u>153</u>	
2. Farmers and Farm Managers	<u>749</u>	<u>524</u>
3. Manager, Officials, Proprietors	<u>3,115</u>	<u>3,340</u>
4. Clerical, Kindred Sales	<u>6,585</u>	<u>7,224</u>
5. Craftsmen; Foremen and Kindred Workers	<u>5,234</u>	<u>3,468</u>
6. Operative and Kindred Workers including Transport	<u>3,415</u>	<u>2,568</u>
7. Service Workers	<u>3,123</u>	<u>3,996</u>
8. Farm Laborers and Foremen	<u>601</u>	<u>384</u>
9. Laborers except Farm	<u>1,404</u>	<u>1,267</u>

<sup>1</sup> This is not intended as a complete enumeration of the labor force in Albany-Laramie Counties.

<sup>2</sup> U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics. Final Report. P.C. (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1961. p.102.

<sup>3</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report. PC (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 152.

FIGURE 4: Medical, Dental, and Other Health Workers



<sup>1</sup> U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics. Final Report. PC (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1961. p. 102.

<sup>2</sup> U.S. Bureau of the Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report. PC (1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. p. 152.

<sup>3</sup> U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming), U.S. Government Printing Office, Washington, D.C., 1961.

<sup>4</sup> U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

<sup>5</sup> U.S. Bureau of Census. Statistical Abstract of the United States: 1962. U.S. Government Printing Office, Washington, D.C., 1962. p. 823.

<sup>6</sup> U.S. Bureau of Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. Table 90.

## SECTION II: HEALTH MANPOWER

### A. INTRODUCTION

This section deals with the number of persons employed in Albany-Laramie Counties in the health professions. In our search of the literature, we found no current enumeration of health professionals in Albany-Laramie Counties; consequently, the following data was obtained from primary sources by means of interview, questionnaire, etc., except where noted otherwise.

It is our intent here to provide the reader with a current and accurate statistical picture of the health manpower situation in Albany-Laramie Counties. Thus, the raw data is ordered in a rather cumbersome, but necessary, nineteen by one-hundred-and-three matrix. The horizontal axis provides the work setting in which the health professionals in Albany-Laramie Counties are employed; the vertical axis indicates the various health occupations which were surveyed. (For the working definitions of these health occupations, see Appendix I.)

The reader will note that many of the occupational categories in various work settings are blank. Rather than omit these, the research team felt that noting the absence of certain categories of health professionals was perhaps an important set of information for the reader.

### B. NARRATIVE SUMMARY

For health manpower, our local data was gathered from primary sources and included only those persons currently practicing in the health professions. The results of the comparisons indicate that we differ from the National ratios primarily for registered nurses and practicing

psychologists; in both cases the Albany-Laramie area indicates a higher ratio of these professionals to the population. (see Figure 5)

It is important here to keep in mind that we may be dealing with a distribution problem rather than with simple ratios of health manpower to population; i.e., our manpower seems to be concentrated in the cities with few if any of our health professionals located outside these population centers.

## C. HEALTH MANPOWER: STATISTICAL SUMMARY

## Employment Settings \*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
1. Administration																				
a. Hospital Administration					6	2	2													10
b. Nursing Home Administration					2							2								4
2. Dentistry																				
a. Dentists																				
1) Endodontists																				
2) Oral Pathologists																				
3) Oral Surgeons																				
4) Orthodontists	3																			3
5) Pedodontists		1																		1
6) Periodontists							1													1
7) Prosthodontists							1													1
8) Public Health Dentists											1									1
9) General Dentistry	33	4				2	6													45
b. Dental Hygienists	7.5	1					4				1									13.5
c. Dental Laboratory Technicians						1	3													4

## \*Legend

1 -Private Office	4a-Community Health Service	7 -Business and Industry
2a-Diagnostic Clinic	4b-County Health Service	8a-Educational Institution: Practicing
2b-Treatment Clinic	4c-State Health Service	8b-Educational Institution: Teaching
2c-Diagnostic/Treatment Clinic	4d-Federal Health Service	8c-Educational Institution: Teaching and Practicing
3a-Community Hospital	5 -Nursing Home	9 -Health Planning and Development Organizations
3b-V.A. Hospital	6a-Mental Hospital	
3c-Military Installation	6b-Mental Health Center	

Employment Settings\*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
3. Dietetic and Nutritional Services																				
a. Dietitians					5.5		2									2				9.5
b. Nutritionists																				
4. Emergency Health Services																				
a. Emergency/Ambulance Attendants	8.5				9		9													26.5
5. Environmental Health Services																				
a. Health Physicists																				
b. Industrial Hygienists										4										4
c. Environmental Scientists								1	5											6
d. Sanitarians																				
e. Public Health Engineers																				
6. Health Education																				
a. Public Health Educators																				
b. School Health Educators																55				55
c. Health Science Educators																				
7. Health Planning																				
a. Patient Care Analysts																				
b. Health Care Planners										3	3.5									6.5
c. Bio-statisticians																				
8. Medical Librarians					1	.5	1			1										3.5

\*Legend: Refer to first page of this summary.

## Employment Settings:

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
9. Medical Records Services																				
a. Medical Record Librarians					1.5															1.5
b. Record Technicians					1	1														2
c. Record Clerks					11	3	4													18
10. Medical Technology																				
a. Medical Technologists	4.5	1			19.5	4	1									1				31
b. Medical Technicians	5		.5	3	1	1			1							1				12.5
c. Certified Lab Technicians					1		6		2											9
d. Cytology/Tissue Technicians					2															2
e. Laboratory Assistants	4				3				1											8
11. Medicine and Osteopathy																				
a. Physicians																				
Allergist																				
Anesthesiologist	4																			4
Aviation Medicine Spec.							2													2
Cardiovascular Dis. Spec.																				
Colon-Rectal Surg. (Proc.)																				
Dermatologist	1																			1
Emergency Specialist																				
Endocrinologist																				
Gastroenterologist																				
General Practitioner	16		2			1	5								1	2				27
Gynecologist/Obstetrician	4																			4
Internist	7		1			7	1													16
Manipulative Therapy Spec.																				
Neurological Surgeon	2.5																			2.5
Neurologist																				
Occupational Med. Spec.																				
Ophthalmologist	6																			6
Orthopedic Surgeon	4																			4

\*Legend: Refer to first page of this summary.



Employment Settings\*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
a. Physicians (continued)																				
Otolaryngologist	4																			4
Pathologist	3				1															4
Pediatrician	1	1					1													3
Physiatrist																				
Plastic Surgeon																				
Preventive Med. Spec.																				
Psychiatrist	3						1							.5						4.5
Public Health Physician										2										2
Pulmonary Disease Spec.																				
Radiologist	6						1													7
Surgeon	5					4	1													10
Thoracic Surgeon	2																			2
Urologist	2																			2
Intern																				
Resident						2														2
b. Osteopathic Physicians	2																			2
12. Nursing and Related Services																				
a. Registered Nurses	28	2			188	44	26		12	13		18				2	8	2		343
b. Licensed Practical Nurses	4		2		42	8	3					12.5		1						72.5
c. Nurse Aides/Orderlies		1			213	39	44					72					1.5			370.5
d. Ward Clerks					24	5	5													34
e. Surgical Technicians					8		4													12
13. Pharmacy																				
a. Pharmacists	82.5				6	1	1										1			41.5
b. Pharmacy Aides					1		2													3
c. Pharmacy Interns	3				1															4

\*Legend: Refer to first page of this summary.

**\*Legend:** Refer to first page of this summary.

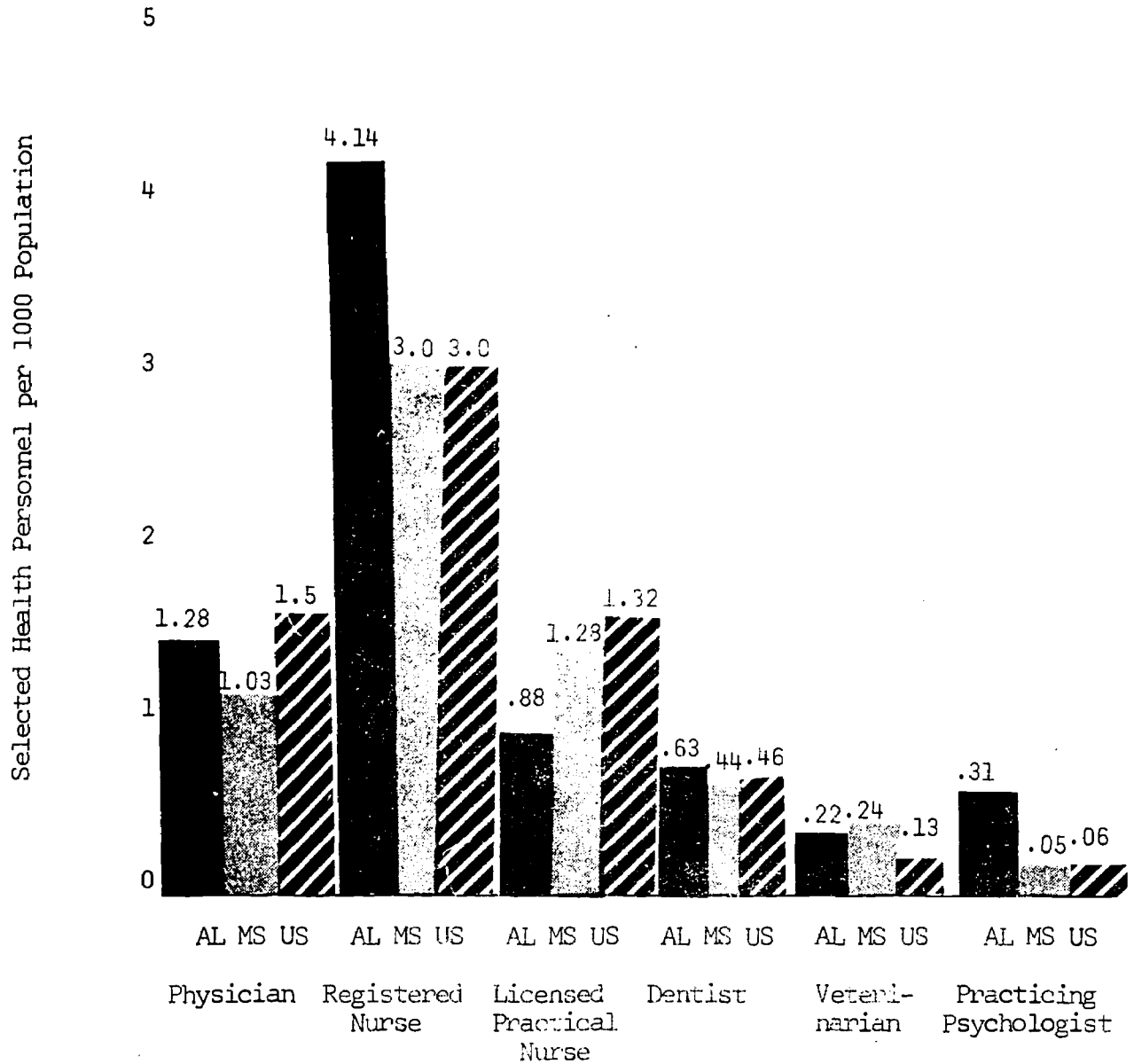
-16-

Employment Settings\*

	1l	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
20. Physician Support Personnel																				
a. Physician's Assistants																				
b. Nurse Clinicians																				
c. Nurse Anesthetists					1	1														2
21. Other																				
a. Bio-Engineering							4													4
b. ECG Technicians					.5	1														1.5
c. EEG Technicians					.5	1														1.5
d. Optometrists	6						1													7
e. Orthoptists	1																			1
f. Podiatrists	2																			2

\*Legend: Refer to first page of this summary.

FIGURE 5: Selected Health Personnel



AL = Albany-Laramie Counties  
 MS = Mountain States  
 US = United States

<sup>1</sup> All Mountain States and U.S. data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

## SECTION III: EDUCATION OF HEALTH MANPOWER

### A. INTRODUCTION

This section is divided into three sets of information concerning the educational facilities which train persons to work in the health professions. The first portion of this section is a listing of the various institutions, and programs within those institutions, which provide original training for the health professions in Albany-Laramie Counties. This listing includes the time required for certification for a given program as well as the number of persons who have been enrolled and who have graduated in the last three years, where such information was available. A blank space in the "enrollee-graduate" section indicates that this information was not available at the time of this publication or that the program was not operative at that time.

The second portion lists all the other institutions, and programs within those institutions which train health professionals in the State of Montana outside of Albany-Laramie Counties. Here only a simple listing of such programs is given without the inclusion of training time or enrollee-graduate information.

The third portion of this section is an itemization of "health facility libraries" including the number of books and periodicals in those libraries in the Albany-Laramie Counties area; and the location and type of video-tape equipment on hand in health facilities in the Albany-Laramie Counties area.

The fourth portion is a listing of those persons in the Albany-Laramie area who have a formal responsibility for continuing education of health professionals. This includes an indication of the major category of persons included in the continuing education programs as well as the approximate percentage of time this person devotes to this particular responsibility.

The research team has not provided comparison data here for the relative ratios of graduates in the health professions for two major reasons. First, the location of training institutions would provide an obviously higher concentration of graduates to population than would be expected over a normal distribution including areas which do not have training programs for health professionals. Secondly, the number of graduates in a given health training program seems not to be an accurate indicator of the availability of these newly trained health workers for that area; e.g., the fact that University of Wyoming produced 27 graduates in their nursing program in 1972 does not necessarily mean that there are 27 newly trained nurses available to work in the Laramie area this year. Some of these persons will obviously seek work elsewhere; others will not be employed, etc. Consequently, we felt that such comparison data to Regional or National ratios would be more misleading than helpful.

## B. EDUCATION OF HEALTH MANPOWER: ORIGINAL EDUCATION PROGRAMS

Area Surveyed Albany-Laramie Counties

Institutions Certifying Health Personnel

### 1. Hospitals

A. Memorial Hospital of Laramie County  
(Name)

1) <u>Inhalation Therapy</u> (Type of Program)	<u>12 Months (approx.)</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees*	<u>0</u>	<u>0</u>	<u>5</u>
b. Graduates*	<u>0</u>	<u>0</u>	<u>0</u>

### 2. Technical Institutes

A. Laramie Vocational School of Practical Nursing  
(Name)

1) <u>Licensed Practical Nurse</u> (Type of Program)	<u>12 Months (approx.)</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>20</u>	<u>21</u>	<u>24</u>
b. Graduates	<u>16</u>	<u>18</u>	<u>22</u>

### 3. Community Colleges

A. Laramie County Community College  
(Name)

1) <u>Surgical Technician</u> (Type of Program)	<u>2 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>5</u>	<u>0</u>	<u>0</u>
b. Graduates	<u>5</u>	<u>0</u>	<u>0</u>

\* Data for "Enrollees" is for September of that year

\*\*Data for "Graduates" is for June of that year

2) <u>X-ray Technician</u> (Type of Program)	<u>2 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>12</u>	<u>11</u>	<u>14</u>
b. Graduates	<u>7</u>	<u>9</u>	<u>    </u>
3) <u>Environmental Health</u> (Type of Program)	<u>2 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>18</u>	<u>13</u>	<u>0</u>
b. Graduates	<u>11</u>	<u>8</u>	<u>0</u>
4) <u>Medical Secretary</u> (Type of Program)	<u>2 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>25</u>	<u>5</u>	<u>9</u>
b. Graduates	<u>19</u>	<u>4</u>	<u>    </u>
5) <u>Licensed Practical Nurse</u> (Type of Program)	<u>2 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>0</u>	<u>26</u>	<u>30</u>
b. Graduates	<u>0</u>	<u>22</u>	<u>    </u>

#### 4. Universities

##### A. University of Wyoming (Name)

1) <u>Pharmacy</u> (Type of Program)	<u>5 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>32</u>	<u>46</u>	<u>49</u>
b. Graduates	<u>24</u>	<u>28</u>	<u>23</u>



2) <u>Registered Nurse</u> (Type of Program)	<u>4 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>47</u>	<u>56</u>	<u>67</u>
b. Graduates	<u>36</u>	<u>19</u>	<u>27</u>
3) <u>Medical Technology</u> (Type of Program)	<u>4 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>8</u>	<u>24</u>	<u>23</u>
b. Graduates	<u>12</u>	<u>14</u>	<u>10</u>
4) <u>Speech Pathology and Audiology</u> (Type of Program)	<u>4 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>12</u>	<u>22</u>	<u>24</u>
b. Graduates	<u>18</u>	<u>23</u>	<u>8</u>
5) <u>Psychology (M.A. and Ph.D.)</u> (Type of Program)	<u>5 to 7 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>39*</u>	<u>42</u>	<u>47</u>
b. Graduates	<u>5*</u>	<u>12*</u>	<u>11</u>

\* Estimates: Data unavailable

C. HEALTH EDUCATION PROGRAMS: ORIGINAL EDUCATION OUTSIDE AREA AND IN-STATE

Area Surveyed Montana

Original Education Centers (Name and Location)	Personnel Categories Trained
Casper College Casper, Wyoming	Nursing, A.D. and Baccalaureate Transfer, Licensed Practical Nurse
Central Wyoming College Riverton, Wyoming	Pre-nursing, Pre-pharmacy
Eastern Wyoming College Torrington, Wyoming	Pre-nursing
Northwest Community College Powell, Wyoming	Pre-med Technology, Pre-pharmacy, Mortuary, Chiropractor, Physical Therapy, Pre-optometry, Pre- occupational Therapy, Child Health Association

# D. HEALTH EDUCATION RESOURCES

Area Surveyed ALBANY-LARAMIE.

## 1. Health Science Libraries

### a. Specialized (e.g. Biological Sciences)

(List) Names and Addresses . . . .

Library (Allied Health Only)  
Laramie Co. Community College  
Cheyenne, Wyoming 82001

45

18

Public Health Library  
Div. of Health & Social Services  
State Office Building  
Cheyenne, Wyoming 82001

650

61

Science Library  
University of Wyoming  
Laramie, Wyoming 82070

90,000

1,927

### b. Health Facility Libraries

(List) Names and Addresses . . . .

DePaul Hospital  
Cheyenne, Wyoming 82001

500

4

Ivinson Memorial Hospital  
Laramie, Wyoming 82070

150

33

Memorial Hospital of Laramie County  
Cheyenne, Wyoming 82001

650

21

School of Pharmacy  
University of Wyoming  
Laramie, Wyoming 82070

1,900

45

## HEALTH EDUCATION RESOURCES (Contd.)

Area Surveyed ALBANY-LARAMIE

### 2. Video-Tape Capability

Locations	Brand	Quantity	Size
Jane Media Center	Sony	1	1 inch
University of Wyoming Laramie, Wyoming 82070	Sony	1	1/2 inch
Laramie Co. Community College Cheyenne, Wyoming 82001	Panasonic	2	1/2 inch
School of Pharmacy University of Wyoming Laramie, Wyoming 82070	A.V.C.	2	1 inch
State Department of Education Capitol Building Cheyenne, Wyoming 82001	Panasonic Sony	2 1	1/2 inch 1/2 inch

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### 3. Health Audio-Visual Specialists

Locations	Quantity
School of Pharmacy University of Wyoming Laramie, Wyoming 82070	1

# E. HEALTH EDUCATION PROGRAMS: CONTINUING EDUCATION IN AREA

Area Surveyed Albany-Laramie Counties

Name of Person in Charge of Continuing Education	Primary Target Group	*Percent of Time Given to Continuing Education
Sara Anderson School of Nursing University of Wyoming Laramie, Wyoming 82070	Nursing	100%
Ann Davis Asst. Director of Nursing Ivinson Memorial Hospital Laramie, Wyoming 82070	Nursing	100%
Barbara Goetz School of Nursing University of Wyoming Laramie, Wyoming 82070	Nursing	100%
Claude O. Grizzle, M.D. Wyoming Director Mountain States Regional Medical Program Cheyenne, Wyoming 82001	Health Personnel and Consumers	60%
Thelma Isakson DePaul Hospital Cheyenne, Wyoming 82001	Nursing	100%
Elizabeth Webb Memorial Hospital of Laramie County Cheyenne, Wyoming 82001	Nursing	100%
Veterans Administration Center (Name variable by assignment) Cheyenne, Wyoming 82001	All In-House Personnel	50%
Warren AFB Hospital (2 people - Name variable by assignment) Cheyenne, Wyoming 82001	All In-House Personnel	50% 50%
*Estimates		

## SECTION IV: HEALTH FACILITIES

### A. INTRODUCTION

This fourth and final section contains a listing of the numbers of hospitals, nursing homes, medical clinics, dental facilities, clinical laboratories, mental health centers, pharmacies, and ambulances. Simply, this listing is intended to give a statistical picture of structural direct-care capability of the area without regard to the health professionals required to man these facilities.

The research team has provided graphic comparisons for the ratio of hospital beds, nursing home beds, pharmacists, and ambulances per thousand population to the Mountain States Region and to the United States in order to give the reader a basis for judging the relative concentration of these facilities in this particular area.

### B. NARRATIVE SUMMARY

The Albany-Laramie concentration of those facilities included, seems slightly lower than the National average across the board. The concentration of hospital beds may not vary significantly from the Regional and National figures; nursing home beds show a concentration of approximately one per thousand less than the National ratio. (see Figure 6)

Significant, perhaps, is the fact that the ratio of ambulances to population is considerably higher for the Region than it is for either the Albany-Laramie area or for the Nation. (see Figure 7)

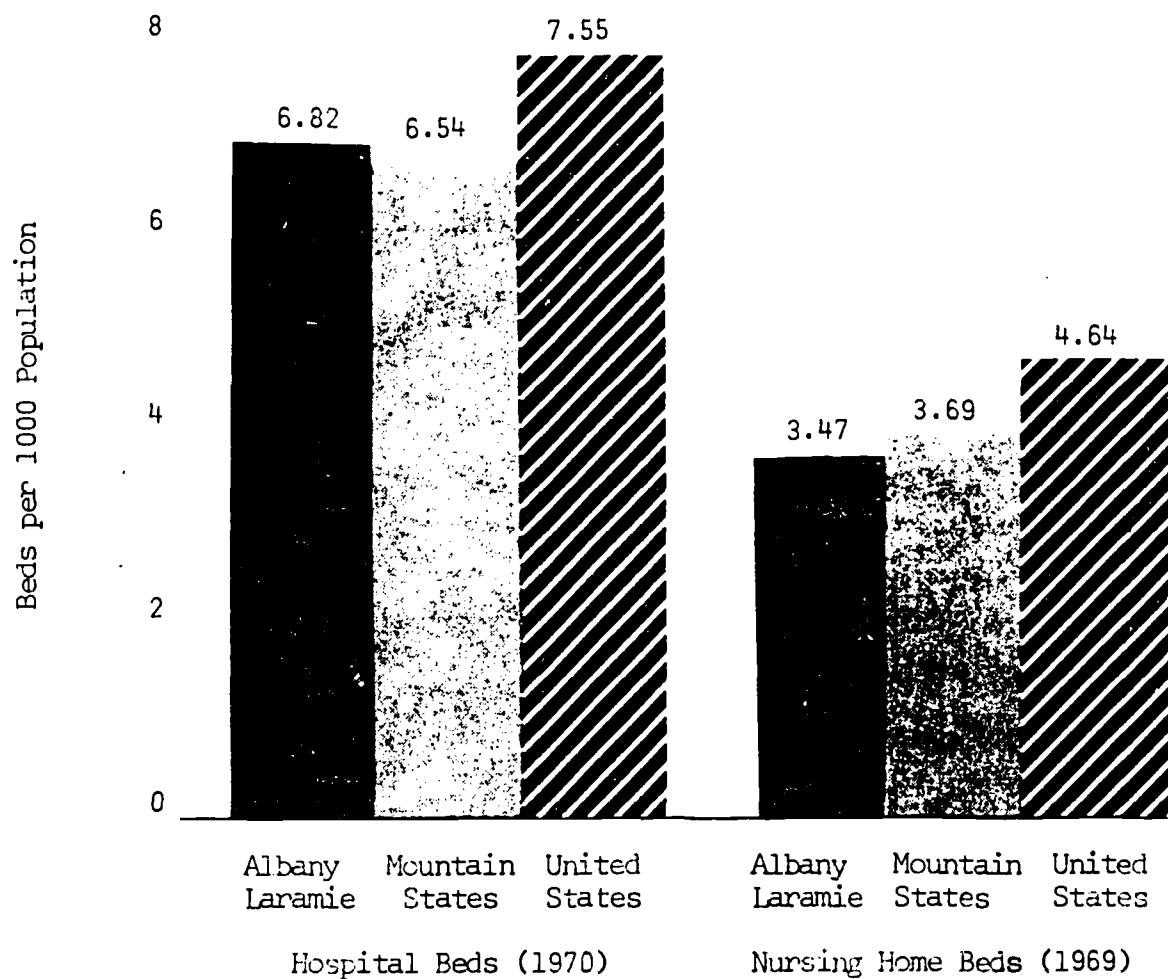
# C. HEALTH FACILITIES: DATA SUMMARY

Area Surveyed Albany-Laramie Counties

## INSTITUTIONS

1. Hospitals	5
-----	-----
a. Number Beds	565
2. Nursing Homes	3
-----	-----
b. Number Beds	287
3. Medical (Clinics)	5
4. Dental Facilities	29
5. Clinical Laboratories	5
6. Mental Health Centers	2
7. Pharmacies	16
8. Ambulances	9
9. University of Wyoming Student Health Service	1 (23 beds)

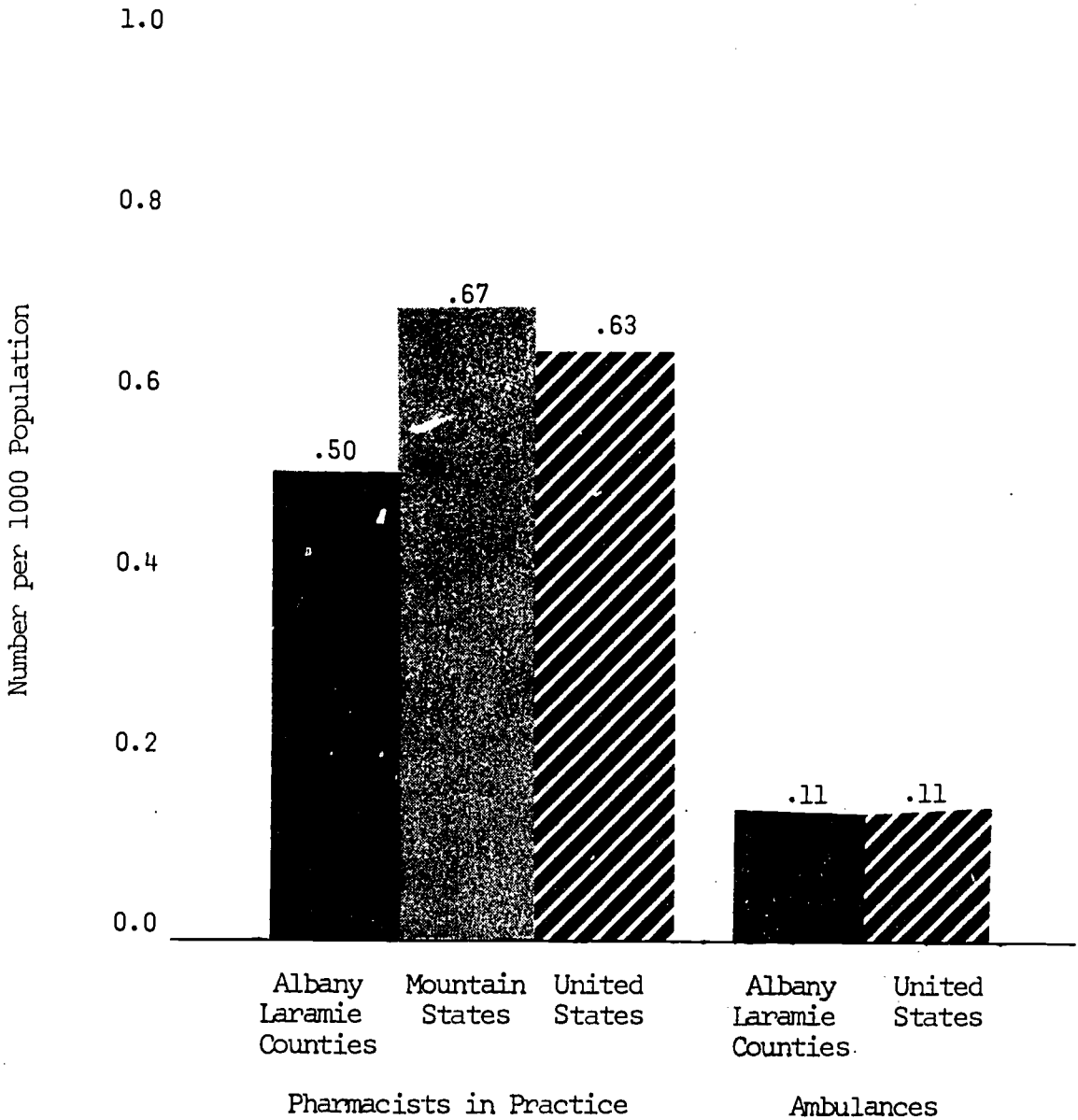
FIGURE 6: Hospital and Nursing Home Beds



<sup>1</sup> All Mountain States and United States Data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 22-1509. U.S. Government Printing Office, Washington, D.C., 1972.



FIGURE 7: Pharmacists -- Ambulances



<sup>1</sup> All Mountain States and U.S. data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

## APPENDIX I

### MS/RMP WORKING DEFINITIONS OF HEALTH OCCUPATIONS

1. Administration
  - a. Hospital Administrators and Assistant Administrators  
Administer and coordinate activities of hospital personnel to promote care of sick and injured, furtherance of scientific knowledge, development of preventive medicine, advancement of medical and vocational rehabilitation, and participation in and promotion of community health and welfare.
  - b. Nursing Home Administrators and Assistant Administrators  
Same as above, except in nursing homes.
2. Dentistry
  - a. Dentists
    - 1) Endodontists  
Concerned with the etiology, prevention, diagnosis and treatment of diseases and injuries that affect the tooth pulp and apical periodontal tissues.
    - 2) Oral Pathologists  
Examine and diagnose tumors and lesions of mouth.
    - 3) Oral Surgeons  
Perform surgery on mouth and jaws.
    - 4) Orthodontists  
Prevent, diagnose, and correct deviations from normal that occur in growth, development, and position of teeth and other dental-facial structures.
    - 5) Pedodontists  
Treat children's teeth.
    - 6) Periodontists  
Treat inflammatory and destructive diseases of investing and supporting tissue of teeth.
    - 7) Prosthodontists  
Restore and maintain oral functions.
    - 8) Public Health Dentists  
Participate in planning, organizing, and maintaining dental health program of public health agency.
    - 9) General Dentistry  
Diagnose and treat diseases, injuries, and malformations of teeth and gums, and related oral structures.
  - b. Dental Hygienists  
Perform dental prophylactic treatments and instruct groups and individuals in care of teeth and mouth.
  - c. Dental Laboratory Technicians  
Make dentures, partials, etc., as needed by the dentist.
3. Dietetic and Nutritional Services
  - a. Dietitians  
Plan and direct food service programs in hospitals, schools, restaurants, and other public or private institutions.

- b. Nutritionists  
Organize, plan and conduct programs concerning nutrition to assist in promotion of health and control of disease.
- 4. Emergency Health Services
  - a. Emergency/Ambulance Attendants  
Assist persons entering hospital through emergency entrances; and accompany and assist ambulance driver in transporting sick, injured, or convalescent persons.
- 5. Environmental Health Services
  - a. Health Physicists  
Devise and direct research, training, and monitoring programs to protect plant and laboratory personnel from radiation hazards.
  - b. Industrial Hygienists  
Conduct health program in industrial plant or similar organization to eliminate or control occupational health hazards and diseases.
  - c. Environmental Scientists  
Perform research related to specific man-made or natural environmental hazards to health.
  - d. Sanitarians  
Work with general environmental problems related to the control of food and drink, private water supplies and sewage disposal, and control of insects and rodents.
  - e. Public Health Engineers  
Design, construct and maintain large engineering systems or programs and know how public health is affected by these systems.
- 6. Health Education
  - a. Public Health Educators  
Plan, organize and direct health education programs for group and community needs.
  - b. School Health Educators  
Plan, organize and direct health education programs in schools.
  - c. Health Science Educators  
Provide health care and health prevention instruction through community, county, or state organizations.
- 7. Health Planning
  - a. Patient Care Analysts  
Engage in analyzing the comprehensive care of in-patients in an institution, usually a hospital.
  - b. Health Care Planners  
Analyze health needs and services, propose improvements and assist in the implementation of health care programs.
  - c. Bio-statisticians  
Plan surveys, and collect, organize, interpret, summarize, and analyze numerical data on sampling or complete enumeration bases, applying statistical theory and methods to provide usable information in scientific and other fields.
- 8. Medical Librarians  
Manage library or section containing specialized materials for hospitals.
- 9. Medical Records Services
  - a. Medical Record Librarians  
Compile and maintain medical records of hospital and clinic patients.

- b. Record Technicians  
Engaged in the formulation of and handling of medical data recording procedures.
  - c. Record Clerks  
Classify medical records of hospital patients and compile statistics for use in reports and surveys.
10. Medical Technology
- a. Medical Technologists (usually a 4 year degree)  
Perform chemical, microscopic, and bacteriologic tests to provide data for use in treatment and diagnosis of disease.
  - b. Medical Technicians (usually a 2 year degree)  
Perform routine tests in medical laboratory for use in treatment and diagnosis of disease.
  - c. Certified Laboratory Technicians (usually train in 1 year or less)  
Same as b.
  - d. Cytology/Tissue Technicians  
Perform laboratory analysis on cell and tissue samples.
  - e. Laboratory Assistance to the above personnel in laboratory responsibilities.
11. Medicine and Osteopathy
- a. Physicians
    - 1) Allergists  
Specialize in the diagnosis and treatment of allergic conditions.
    - 2) Anesthesiologists  
Administer anesthetics to render patients insensible to pain during surgical, obstetrical and other medical procedures.
    - 3) Aviation Medicine Specialists  
Administer general medicine to flight personnel only.
    - 4) Cardiovascular Disease Specialists  
Specialize in the diagnosis and treatment of diseases of the heart and blood vessels.
    - 5) Colon and Rectal Surgeons (Proctologists)  
Specialize in the treatment of the rectum and its diseases.
    - 6) Dermatologists  
Diagnose and treat diseases of the human skin.
    - 7) Emergency Specialists  
Physicians who work in hospital emergency rooms and handle emergency type cases.
    - 8) Endocrinologists  
Skilled in the diagnosis and treatment of disorders of the glands of internal secretion.
    - 9) Gastroenterologists  
Specialize in diseases of the stomach and intestine.
    - 10) General Practitioners  
Attend to a variety of medical cases in general practice.
    - 11) Gynecologists/Obstetricians  
Treat and diagnose diseases of the female generative organs; treat women during prenatal, natal, and postnatal periods.
    - 12) Internists  
Specialize in the diagnosis and medical treatment of diseases and disorders of the internal structures of the human body.

- 13) Manipulative Therapy Specialists  
Specialize in prescription and supervision of therapeutic administrations.
- 14) Neurological Surgeons  
Specialize in surgery of the nervous system.
- 15) Neurologists  
Diagnose and treat organic diseases and disorders of the nervous system.
- 16) Occupational Medicine Specialists  
Specialize in diagnosis and care of individuals in specific occupations and settings.
- 17) Ophthalmologists  
Diagnose and treat diseases and injuries of the eyes.
- 18) Orthopedic Surgeons  
Preserve, restore, and develop form and function of the extremities, spine, and associated structures by medical, surgical, and physical methods.
- 19) Otolaryngologists  
Diagnose and treat diseases of the ear, nose and throat.
- 20) Pathologists  
Study nature, cause, and development of diseases, and structural and functional changes caused by them.
- 21) Pediatricians  
Plan and carry out medical care program for children from birth through adolescence to aid in mental and physical growth and development.
- 22) Psychiatrists  
Specialize in clinical and diagnostic use of physical agents and exercises to provide physiotherapy for physical, mental and occupational rehabilitation of patients.
- 23) Plastic Surgeons  
Specialize in skin grafts and bone and tissue transplants to restore or repair damaged, lost or deformed parts of the face and body.
- 24) Preventive Medicine Specialists  
Specialize in prescribing practices which prevent physical subsumption and deterioration.
- 25) Psychiatrists  
Study, diagnose and treat diseases and disorders of the mind.
- 26) Public Health Physicians  
Generalists or specialists employed by the community, county, or state.
- 27) Pulmonary Disease Specialists  
Specialize in treating diseases of the lung.
- 28) Radiologists  
Diagnose and treat diseases of the human body, using X-rays and radio-active substances.
- 29) Surgeons  
Perform surgery to correct deformities, repair injuries, prevent diseases, and improve function in patients.
- 30) Thoracic Surgeons  
Perform surgery on the chest.

- 31) Urologists  
Diagnose and treat diseases and disorders of the genito-urinary organs and tract.
  - 32) Interns  
Perform medical duties while serving in hospital for specified length of time to gain practical experience immediately following graduation from medical school, as requirement for license to practice medicine.
  - 33) Residents  
Graduate and licensed physicians resident in a hospital.
- b. Osteopathic Physicians
- 12. Nursing and Related Services
    - a. Registered Nurses  
A term applied to persons meeting the educational, legal, and training requirements to practice as professional nurses, as required by a State board of nursing.
    - b. Licensed Practical Nurses  
Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions.
    - c. Nurse Aides/Orderlies/Attendants  
Assist in care of hospital patients, under direction of nursing and medical staff.
    - d. Ward Clerks  
Prepare and compile records in hospital nursing unit, such as obstetrics, pediatrics or surgery.
    - e. Surgical Technicians  
Health personnel trained specifically to work in an operating room.
  - 13. Pharmacy
    - a. Pharmacists  
Compound and dispense medications, following prescriptions issued by physicians, dentists or other authorized medical practitioners.
    - b. Pharmacy Aides  
Mix pharmaceutical preparations, under direction of pharmacist, issue medicine, label and store supplies, and clean equipment and work areas in hospital pharmacy.
    - c. Pharmacy Interns  
Pharmacy students who work under the supervision of a registered pharmacist.
  - 14. Chiropractors  
Adjust spinal column and other articulations of body to prevent disease and correct abnormalities of human body believed to be caused by interference with the nervous system.
  - 15. Radiologic Technology
    - a. Technologists (usually a 4 year degree)  
Apply roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes.
    - b. Technicians (less than a 4 year degree)  
Same as a.

16. Medical Secretarial/Office Personnel  
Prepare medical charts and reports for doctor or hospital personnel, utilizing knowledge of medical terminology. May prepare and send bills to patients and record appointments and perform general secretarial and clerical services in a medical setting.
17. Psycho-Social Health Services
  - a. Psychologists (M.A. or Ph.D.)  
Diagnose mental and emotional disorders of individuals and administer programs of treatment.
  - b. Social Service Workers  
Counsel or otherwise assist persons for improved social adaptation, e.g., Social Workers, etc.
  - c. Vocational Rehabilitation Counseling  
Persons engaged in counseling individuals and providing group educational and vocational guidance services.
18. Therapists
  - a. Speech Pathology Therapists  
Examine and provide remedial services for patients with speech and language disorders.
  - b. Audiologists  
Specialize in diagnostic evaluation, habilitative and rehabilitative services, and research related to hearing.
  - c. Physical Therapists  
Treat patients with disabilities, disorders, and injuries to relieve pain, develop or restore function, and maintain maximum performance, using physical means such as exercise, massage, heat, water, light, and electricity as prescribed by physician.
  - d. Occupational Therapists  
Plan, organize, and participate in medically oriented occupational program in hospital or similar institution to rehabilitate patients who are physically or mentally ill.
  - e. Inhalation Therapists  
Set up and operate various types of oxygen equipment, such as iron lungs, oxygen tents, resuscitators and incubators to administer oxygen and other gases to patients.
  - f. Orthotists-Prosthetists  
Write specifications for and fit artificial limbs, braces, and appliances for body deformities and disorders following prescription of physician or other qualified medical practitioner.
  - g. Manual Arts Therapists  
Instruct patients in prescribed manual arts activities to prevent anatomical and physiological deconditioning, and to assist in maintaining, improving, or developing work skills.
  - h. Recreational Therapists  
Plan, organize and direct medically approved recreation program for patients in hospitals and other institutions.
19. Veterinarians  
Diagnose and treat diseases and disorders of animals.



20. Physician Support Personnel

a. Physician's Assistants

Assist physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician. Special academic-professional training of one to two years in classroom and clinical work.

b. Nurse Clinicians

Registered nurses who assist a physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician.

c. Nurse Anesthetists

Registered nurses trained and qualified to administer anesthetics.

21. Other

a. Bio-Engineering

Practice of design and innovation of mechanical/electrical devices for biological functioning.

b. ECG Technicians

Personnel trained to operate an electrocardiograph.

c. EEG Technicians

Personnel trained to operate an electroencephalograph.

d. Optometrists

Examine eyes to determine visual efficiency and performancy by means of instrumentation and observation, and prescribe corrective procedures.

e. Orthoptists

Teach persons with correctable focusing defects to develop and use binocular vision (focusing of both eyes).

f. Podiatrists

Diagnose and treat structural problems relating to the foot.



## APPENDIX 2

### PRIMARY DATA SOURCES

Area Surveyed Albany County

SOURCE	DATA TYPE
Albany Manor 18th and Custer Laramie	Personnel and educational resources for listed institution
Dr. Jack Bone, Dean College of Health Sciences University of Wyoming Laramie	Same
Ivinson Memorial Home for Aged Ladies 2017 Grand Avenue Laramie	Same
Laramie Vocational School of Practical Nursing 1014 Ivinson Avenue Laramie	Same
Public Health Nurse 1019 Grand Avenue Laramie	Same
Sheldon Traux, Admin. Ivinson Memorial Hospital Laramie	Same
Southeast Mental Health Center Branch 101 South 3rd Laramie	Same
Vocational Rehabilitation 410 Grand Avenue Laramie	Same

PRIMARY DATA SOURCES (Contd.)

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Private work settings of:

Businesses and Industries

Dentists

Optometrists

Pharmacists

Physicians

Veterinarians

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## APPENDIX 2B

### PRIMARY DATA SOURCES

Area Surveyed Laramie County

SOURCE	DATA TYPE
Richard Alexander, Admin. Eventide Manor 2700 East 12th Street Cheyenne	Personnel and educational resources for the listed institution
American Red Cross 2111 Warren Avenue Cheyenne	Same
Awareness House 2712 Thomas Avenue Cheyenne	Same
City-County Health Unit 315 West 20th Street Cheyenne	Same
Thomas Clark, Admin. Mt. View Towers Health Care 3129 Acacia Drive Cheyenne	Same
John W. Horton, Admin. Veterans Administration Center Cheyenne	Same
Dr. Raymond Muhr, Director SE Wyoming Mental Health Center 305 East 24th Street Cheyenne	Same
William C. Nichols, Admin. Memorial Hospital Cheyenne	Same

PRIMARY DATA SOURCES (Contd.)

SOURCE	DATA TYPE
Sister Rita Louise, Admin. DePaul Hospital Cheyenne	Personnel and educational resources for the listed institution
St. Anne's Maternity Home 634-6392 Cheyenne	Same
LaVerne M. Young, Coordinator Health Occupations Laramie Co. Community College Cheyenne	Same
Private work settings of: Businesses and Industries Dentists Optometrists Pharmacists Physicians Veterinarians	

### APPENDIX 3

#### SECONDARY DATA SOURCES

SOURCE	DATA TYPE
American Dental Association Directory (published annually)	Dentists and Addresses of Employment
American Hospital Association Directory	Hospitals: Number of Beds; Location, etc.
American Medical Association Directory, 1969	Physicians and Specialties by Counties
Bluebook of American Colleges and Universities (four volumes)	Health Education Training Programs by Institution and Specific Addresses, etc.
Bureau of the Census Commerce Department	1960 and 1970 Demographic Data
Comprehensive Health Planning State of Wyoming	Manpower Survey of Health Personnel in Wyoming, 1971
Medical Assistance and Services Title XIX	Licensure of all Health Field Personnel in State
Medical Facilities Services and Medicare	Institutional Information
Official Directory of Registered and Licensed Practical Nurses in the State of Wyoming (State Board of Nursing)	Nursing and Related Services Personnel
Official Directory of Wyoming Board of Dental Examiners (State Dental Services)	Dentists, Specialties, and Dental Hygienists

SECONDARY DATA SOURCES (Contd.)

SOURCE	DATA TYPE
Selected Training Programs for Physician Support Personnel (USDHEW: March 1971)	Original Education for Health Personnel in United States (incomplete)
State Mental Health and Retardation	Mental Health Personnel: Social Work Psychology Psychiatry Institutions
Telephone Directories	Physicians, Specialties; Health Agencies; Private Nurses; Health Institutions
Wyoming MS/RMP Health Profile Updated Supplement 2 May, 1972	Wyoming Health Personnel Quantities
Wyoming Public Health Service	Emergency Service Personnel (ER's and Ambulance, etc.)
Wyoming State Medical Society	All Physicians in Wyoming to date; practicing, retired, etc.

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